1. What is the Hypertext Transfer Protocol (HTTP)?

Hypertext transfer protocol is an application layer protocol for transmitting documents and communicating between web browsers and webservers.

1. Why is HTTP called a *stateless protocol*?

HTTP is called a stateless protocol because the server does not store data between two requests.

1. Describe the three phases of establishing a session using client-server protocols such as HTTP.

The three phases of establishing a session are:

1. The client establishes a connection.
2. The client sends a request and waits for the answer.
3. The server accepts the request, providing status code and appropriate data.
4. Describe the parameters on a get and post request.

Get method is used to request data from specified resource.

Post method is used to send data to a server to create/change a resource.

The main difference is getting method carries the request in the URL whereas, in the post method the data is sent in the body section.

1. What are the HTTP response status code and What do the HTTP status codes, 200, and 404 indicate?

HTTP response code displays the status of the HTTP request whether it is completed or not.

* 1. = Successful, 404 = file not found

1. What are HTTP cookies? Give an example.

Http cookies are a piece of data that the sever sends to the user browser.

1. Why are cookies a security issue?

Cookies have information stored in them, are visible to the user. That information can be hijacked by another user using third-party software if not careful.

1. Describe session hijacking and XSS?

Session hijacking is a method of taking over a web user session without the user notice obtaining the session ID and be disguised as something else.

XSS is a common attack that injects malicious code into a vulnerable application which can hijack users top secret documents.

1. Describe Cross-site request forgery (CSRF)?

CSRF is an attack on server that tricks the web browser into executing an unwanted action in an authorized application which causes data theft, stolen cookie.

1. What are Cross-site HTTP requests (CORS) and what requests use CORS?

CORS is an HTTP based mechanism that allows a server to indicate any other origin other than its own from which its server should permit.